

# The Comprehensive Course for Accessing 2020 Census Redistricting Data

Explore and learn the different methods to access P.L. 94-171 Redistricting Data

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U.S. Census Bureau

[Census.gov/academy](https://www.census.gov/academy)



The screenshot shows the Microsoft Access interface. The title bar indicates the file is "2020PL\_SummaryFile\_Shell : Database- H:\CENSUS ACADEMY..." and the user is "Alexandra S Barker (CENSUS...)". The ribbon includes tabs for File, Home, Create, External Data, Database Tools, and Help. The "Home" tab is active, showing options for View, Paste, Filter, Sort & Filter, Refresh, Save, Delete, and Find. The "All Access Objects" pane on the left shows a list of tables and queries. The "Example\_Query\_DataSegment1 Blocks" table is selected, displaying a datasheet view with columns: SUMLEV, GEOCODE, GEOID, NAME, and BASE. The data shows a list of census blocks for a specific geographic area, with SUMLEV values ranging from 750 to 750 and GEOID values ranging from 4400700010110 to 4400700010120. The status bar at the bottom indicates "Record: 1 of 12600" and "No Filter".

| SUMLEV | GEOCODE       | GEOID         | NAME       | BASE |
|--------|---------------|---------------|------------|------|
| 750    | 4400700010110 | 7500000US4400 | Block 1000 | 1000 |
| 750    | 4400700010110 | 7500000US4400 | Block 1001 | 1001 |
| 750    | 4400700010110 | 7500000US4400 | Block 1002 | 1002 |
| 750    | 4400700010110 | 7500000US4400 | Block 1003 | 1003 |
| 750    | 4400700010110 | 7500000US4400 | Block 1004 | 1004 |
| 750    | 4400700010110 | 7500000US4400 | Block 1005 | 1005 |
| 750    | 4400700010110 | 7500000US4400 | Block 1006 | 1006 |
| 750    | 4400700010110 | 7500000US4400 | Block 1007 | 1007 |
| 750    | 4400700010110 | 7500000US4400 | Block 1008 | 1008 |
| 750    | 4400700010110 | 7500000US4400 | Block 1009 | 1009 |
| 750    | 4400700010110 | 7500000US4400 | Block 1010 | 1010 |
| 750    | 4400700010110 | 7500000US4400 | Block 1011 | 1011 |
| 750    | 4400700010110 | 7500000US4400 | Block 1012 | 1012 |
| 750    | 4400700010110 | 7500000US4400 | Block 1013 | 1013 |
| 750    | 4400700010110 | 7500000US4400 | Block 1014 | 1014 |
| 750    | 4400700010110 | 7500000US4400 | Block 1015 | 1015 |
| 750    | 4400700010110 | 7500000US4400 | Block 1016 | 1016 |
| 750    | 4400700010110 | 7500000US4400 | Block 1017 | 1017 |
| 750    | 4400700010110 | 7500000US4400 | Block 1018 | 1018 |
| 750    | 4400700010110 | 7500000US4400 | Block 1019 | 1019 |
| 750    | 4400700010110 | 7500000US4400 | Block 1020 | 1020 |
| 750    | 4400700010110 | 7500000US4400 | Block 1021 | 1021 |
| 750    | 4400700010120 | 7500000US4400 | Block 2000 | 2000 |
| 750    | 4400700010120 | 7500000US4400 | Block 2001 | 2001 |
| 750    | 4400700010120 | 7500000US4400 | Block 2002 | 2002 |

## Lesson 3

# Ways to Access Redistricting Data

Identify the Methods and Formats to Access  
Redistricting Data

Understand What Method or Format Supports  
Your Needs

Supporting Resources

# Getting the Data

## PATHWAY 1

### File Transfer Protocol (FTP)

Great resource for those who want to perform in-depth analysis and customize their analysis of data sets.

## PATHWAY 2

### Data Visualizations and Tools

Data Visualizations are easy to use and help you quickly find statistics and identify trends.

The data available are specific to each tool.

## PATHWAY 3

### [data.census.gov](https://data.census.gov)

A customizable way to view, map, and access data one table at a time for all available geographies.

## PATHWAY 4

### Application Programming Interface (API)

Typically used by developers and software engineers, the Census Bureau API allows developers to pull Census data into their products or applications.

# Why Choose the FTP? (Learning Pathway 1)

## File Transfer Protocol (FTP)

Great resource for those who want to perform in-depth analysis and customize their analysis of data sets.

### KEY FEATURES

- Multi-step process to access
- Intermediate to advanced
- Large complete data sets
- Raw data

### NECESSARY RESOURCES

- Software required
- Sufficient computer storage for large data sets
- GIS software for those who want to map the data

## FTP Data Resources

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- ✓ Access to a computer with sufficient storage
- ✓ Software to use FTP files: Microsoft Access (today's demonstration), R, SAS, SQL, SQLite, Oracle, Python, etc.
- ✓ If mapping is needed, you can download shapefiles from TIGER/Line shapefiles from the Redistricting Data Program Webpage. You would also need software such as Maptitude, ArcGIS or Tableau to join the shape files with the data.

# Why Choose Data Visualizations? (Learning Pathway 2)

## Data Visualizations and Tools

Data Visualizations are easy to use and help you quickly find statistics and identify trends.

The data available are specific to each tool.

### KEY FEATURES

- View by topic of interest/several options to choose from
- Easy to use and navigate
- May have limited downloading features

### NECESSARY RESOURCES

- Mobile and desktop computer friendly



# Why Choose data.census.gov? (Learning Pathway 3)

**data.census.gov**

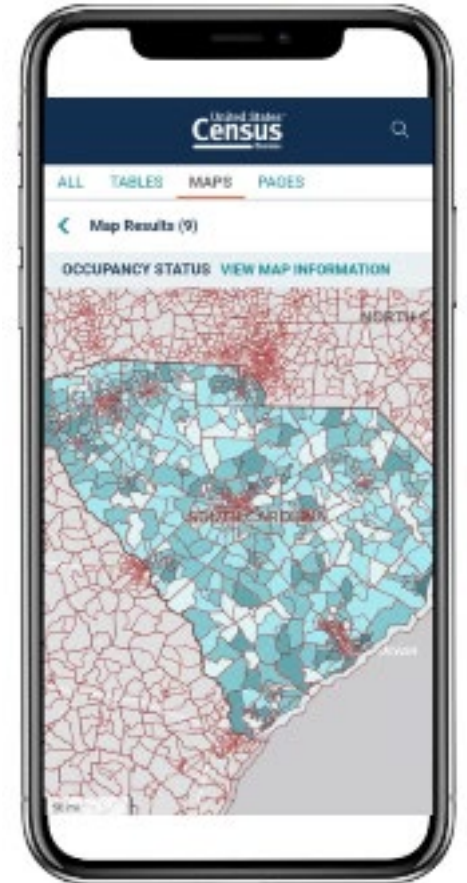
A customizable way to view, map, and access data one table at a time for all available geographies.

## KEY FEATURES

- Data can be downloaded in CSV, PDF, or Excel format
- Work with one table at time
- Easy to use with basic instruction
- Mapping and table customization within the tool

## NECESSARY RESOURCES

- Mobile and desktop computer friendly





# Why Choose the Census API? (Learning Path Four)

## Application Programming Interface (API)

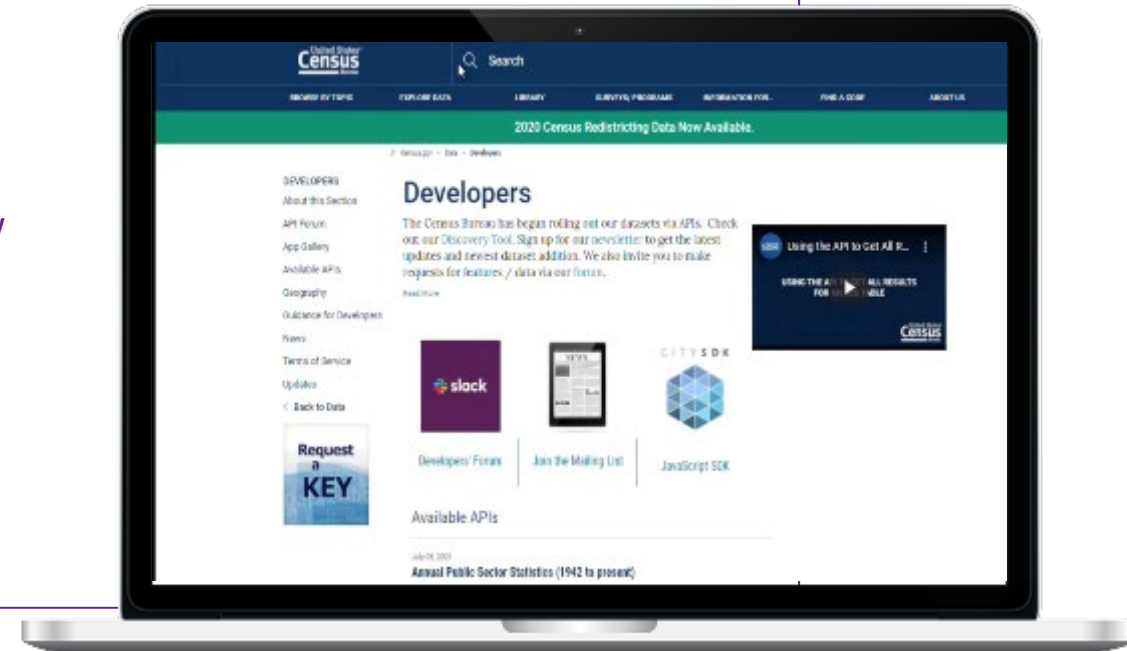
Typically used by developers and software engineers, the Census Bureau API allows developers to pull Census data into their products or applications.

### KEY FEATURES

- Automate census data integration with various apps and visualization tools
- Intermediate to advanced multi-step process
- Construct your customized data sets
- Raw data

### NECESSARY RESOURCES

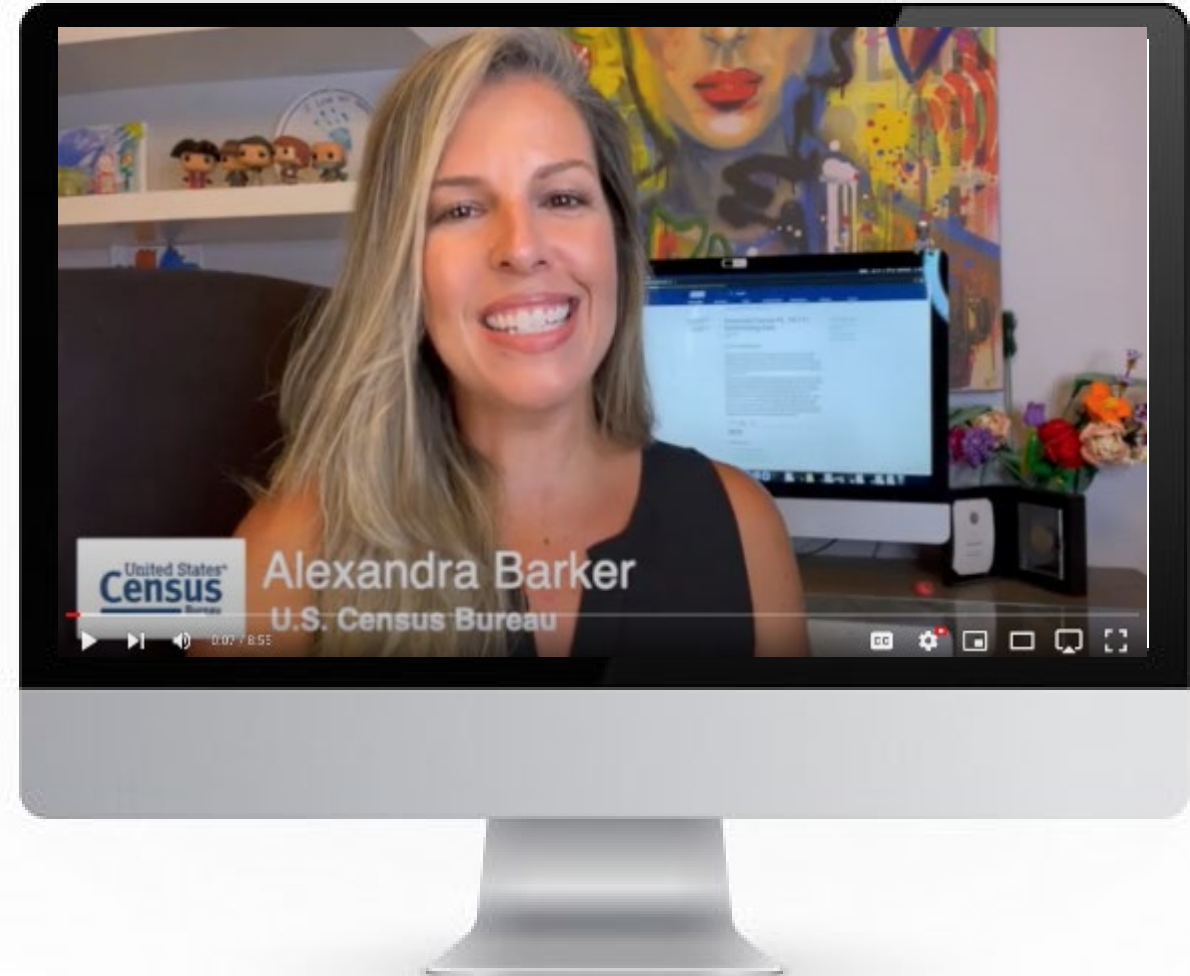
- Appropriate software and know-how





# Comparing Redistricting Data Over Time?

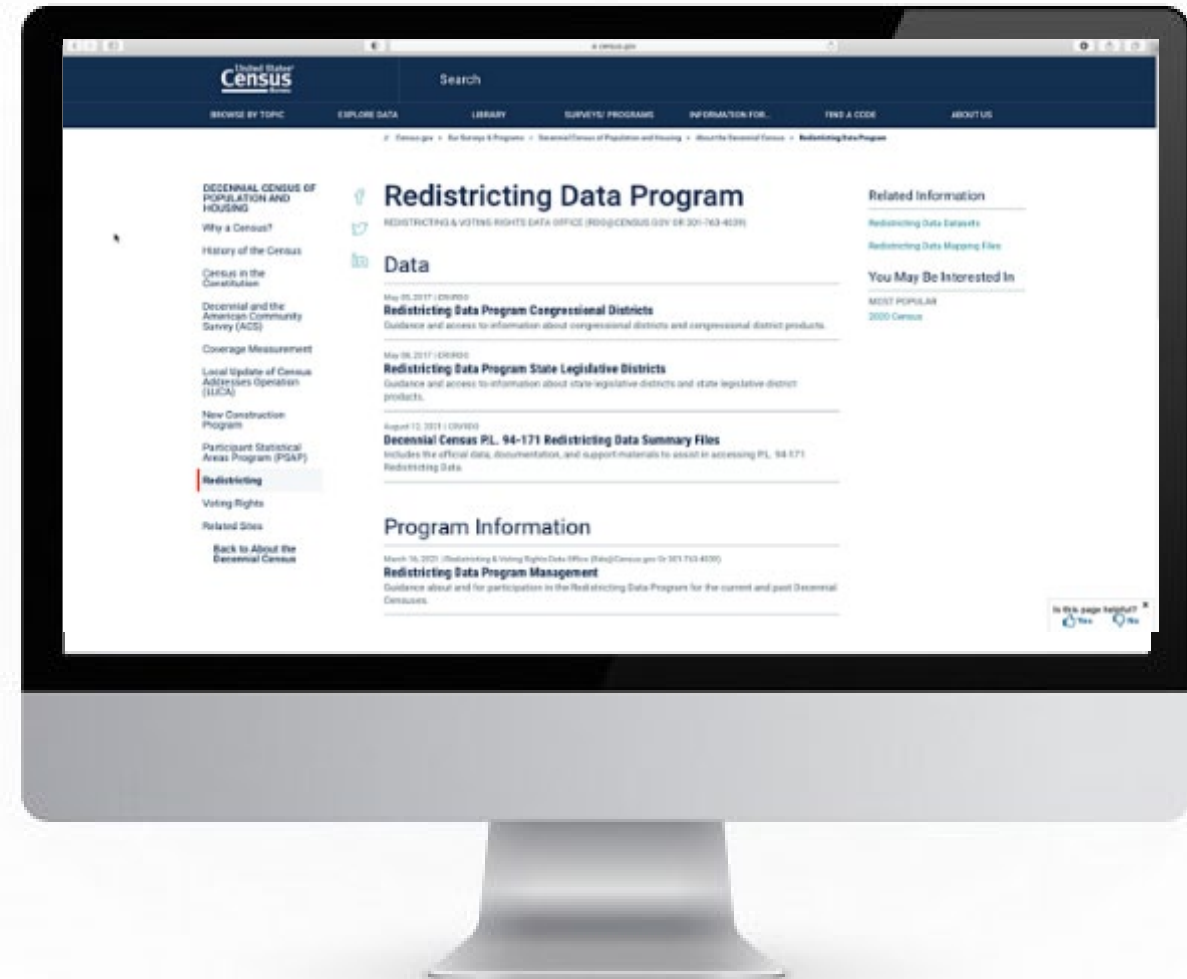
- ✓ Do's and Don'ts
- ✓ Tips
- ✓ Resources/References
- ✓ Demonstration of TIGERweb Decennial



# Redistricting and Voting Rights Data Office

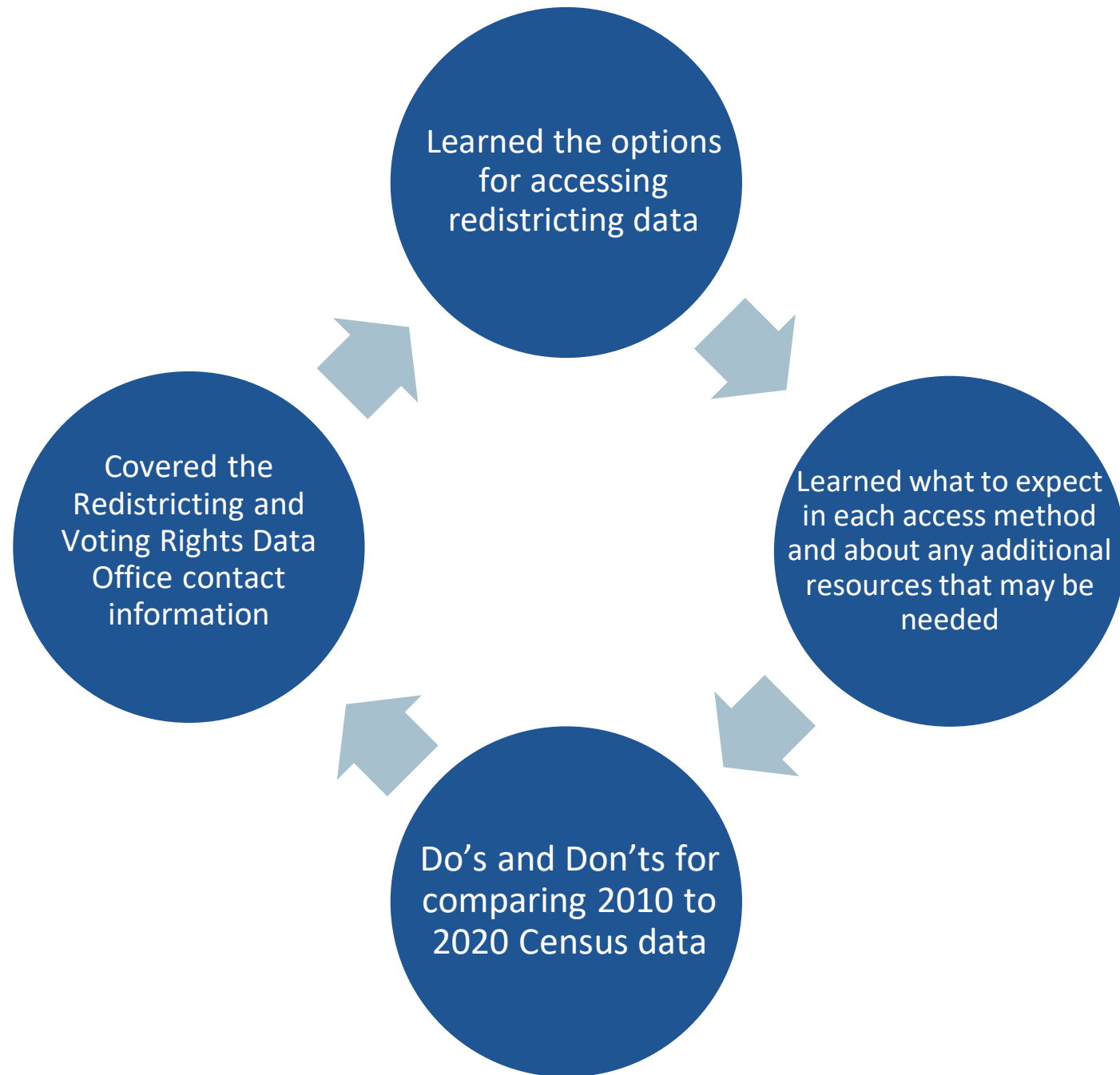
## REDISTRICTING & VOTING RIGHTS DATA OFFICE

- RDO@CENSUS.GOV
- 301-763-4039
- <https://www.census.gov/programs-surveys/decennial-census/about/rdo.html>



## Lesson 3 Recap

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UP NEXT:  
PART 2: The Data

## **Pathway 1: FTP**

Lessons 4-8

## **Pathway 2: Data Visualizations**

Lesson 9

## **Pathway 3: [data.census.gov](https://data.census.gov)**

Lesson 10

## **Pathway 4: API**

Lessons 11-12

UP NEXT:  
PART 2 The Data

**Pathway 2: Data Visualizations**  
Lesson 9

**Pathway 3: [data.census.gov](https://data.census.gov)**  
Lesson 10

**Pathway 4: API**  
Lessons 11-12